

Part III, Item 11(c)—Trading Services, Facilities and Rules

Request: *Explain the established; non-discretionary rules and procedures of the NMS Stock ATS, including order interaction rules for the priority, pricing methodologies, allocation, matching, and execution of orders and trading interest, and other procedures governing trading, such as price improvement functionality, price protection mechanisms, short sales, locked-crossed markets, the handling of execution errors, and the time-stamping of orders and executions.*

Response: Typically, a resting Day order in Sigma X2 will execute against an incoming IOC order and Sigma X2 will classify the resting Day order as liquidity-providing and the IOC order as liquidity-taking. Please refer to the Matching Scenarios grid below for examples.

Sigma X2 Matching Scenarios Examples (assumes orders with marketable limit prices)

| | | | Sell | | | | | |
|-----|---------------------------------|-----------------|--|-------------|----------------|-----------------|-------------|----------------|
| | | | Incoming ("Liquidity-Taking") | | | | | |
| | | | Primary Peg IOC | Mid Peg IOC | Market Peg IOC | Primary Peg Day | Mid Peg Day | Market Peg Day |
| Buy | Resting ("Liquidity-Providing") | Primary Peg Day | No match | No match | Bid | No match | No match | Bid |
| | | Mid Peg Day | No match | Mid | Mid | No match | Mid | Mid |
| | | Market Peg Day | Offer | Mid | Mid | Offer | Mid | Mid |
| | | Primary Peg IOC | Sigma X2 does not classify IOC orders as "liquidity-providing" | | | | | |
| | | Mid Peg IOC | | | | | | |
| | | Market Peg IOC | | | | | | |

Additionally, set forth below is a chart that illustrates price improvement in Sigma X2.

Assume that the National Best Bid = \$20.00; the National Best Offer = \$20.10; National Best Mid = \$20.05

| Buy Order | Sell Order | Execution Price |
|-----------|------------|-----------------|
| \$21.000 | \$20.000 | \$20.050 |
| \$21.000 | \$20.030 | \$20.050 |
| \$20.070 | \$20.000 | \$20.050 |
| \$20.070 | \$20.060 | \$20.060 |
| \$20.040 | \$20.000 | \$20.040 |
| \$20.040 | \$20.030 | \$20.040 |